AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A warm control rolling method, ~~being a rolling method of~~ for manufacturing steel mainly composed of fine ferrite particle texture with average ferrite grain size controlled by a desired value of 3 μm or less, which comprises,

rolling the steel, in ~~one or more passes,~~continuous multipass rolling at a rolling temperature range of 350°C to 800°C,

in a condition where the rolling condition parameter expressed in formula (1)

$$Z = \log\left[\frac{\varepsilon}{t}\exp\left(\frac{Q}{8.31\,(T+273)}\right)\right] \qquad (1)$$

ε: strain

t: duration from start till end of rolling (s)

T: rolling temperature (°C, or average of rolling temperature of each pass in the case of multipass rolling)

Q: 254,000 if mother phase of texture just before rolling is ferrite, bainite, martensite, or pearlite; 300,000 if mother phase is austenite,

is 11 or more (in the case the texture just before rolling is ferrite, bainite, martensite, or pearlite, that is, Fe crystal structure is bcc) or 20 or more (in the case the texture just before rolling is austenite, that is, Fe crystal structure is fcc), and ~~the rolling temperature range is 350°C to 800°C,~~

~~rolling under condition that~~wherein at least one pass interval is longer than 20 seconds, so that the material temperature upon start of rolling of each rolling pass does not exceed the maximum temperature of 800 °C, and the material temperature during rolling and right after final rolling (within 1 second) is not 350 °C or lower, and

~~rolling~~ so that, in each rolling pass, temperature $T_{x\text{-}out}$ right after rolling (within 1 second) is not higher than temperature that is higher than rolling entry temperature $T_{x\text{-}in}$ by 100 °C and the material temperature right after rolling (within 1 second) is not lower than temperature that is lower than the temperature right before rolling by 100°C.

2. (Previously Presented) The warm control rolling method of claim 1, wherein the temperature $T_{x\text{-}out}$ right after rolling in each rolling pass is not higher than temperature that is higher than the rolling entry temperature $T_{x\text{-}in}$.by 50°C.

3. (Previously Presented) The warm control rolling method of claim 1, comprising rolling two or more passes consecutively in rolling temperature range of 350°C to 800°C, wherein the material temperature right after two passes is not higher than temperature that is higher than the material temperature upon start of rolling by 100°C, and not lower than temperature that is lower than the material temperature upon start of rolling by 100°C.

4. (Previously Presented) The warm control rolling method of claim 3, wherein the material temperature right after two passes is not higher than temperature that is higher than the material temperature upon start of rolling by 50°C.

5. (Previously Presented) The warm control rolling method of claim 1, wherein the rolling temperature range is 400°C to 500°C.

6. (Currently amended) The warm control rolling method of claim 1, wherein Z is 12 or more and, and the method is for manufacturing steel mainly composed of fine ferrite particle texture with an average ferrite grain size controlled by a desired value of 1 μm or less.

7. (Previously Presented) The warm control rolling method of claim 1, further comprising, in starting rolling in consecutive multipass rolling, waiting until the rolling entry temperature $T_{x+1\text{-}in}$ of X+1-th pass becomes $Ts+20 \geq T_{x+1\text{-}in}$ when the rolling temperature $T_{x\text{-}out}$ right after X-th pass is higher than chosen rolling temperature Ts.

8. (Previously Presented) The warm control rolling method of claim 1, further comprising measuring the processing heat generation T_{xH} at X-th pass in multipass rolling

beforehand, and defining the rolling entry temperature $T_{x\text{-}in}$ in the relation of $T_{xs} \geq T_{x\text{-}in} \geq T_{xs} - T_{xH}$, where T_{xs} is a chosen rolling temperature.

9. (Previously Presented) The warm control rolling method of claim 1, wherein a total reduction area in continuous rolling is 50% or more.

10. (Previously Presented) The warm control rolling method of claim 1, wherein a plastic strain, or a strain converted into true strain from a reduction of area is 1.5 or more.

11. (Previously Presented) The warm control rolling method of claim 1, further comprising introducing the strain by multidirectional processing.

12. (Previously Presented) The warm control rolling method of claim 1, further comprising controlling the temperature range before and after rolling by setting a rolling speed and a draft of each pass.

13. (Previously presented) The warm control rolling method of claim 1, wherein the continuous rolling further comprises a step of reheating in the midst of rolling for compensating for temperature drop of material, and a step of cooling in the midst of rolling for suppressing temperature rise of material.

14. (Previously Presented) The warm control rolling method of claim 2, wherein the rolling temperature range is 400°C to 500°C.

15. (Previously Presented) The warm control rolling method of claim 3, wherein the rolling temperature range is 400°C to 500°C.

16. (Previously Presented) The warm control rolling method of claim 4, wherein the rolling temperature range is 400°C to 500°C.

17. (Currently amended) The warm control rolling method of claim 2, wherein Z is 12 or more and, the method is for manufacturing steel mainly composed of fine ferrite particle texture with an average ferrite grain size controlled by a desired value of 1 μm or less.

18. (Currently amended) The warm control rolling method of claim 3, wherein Z is 12 or more and, the method is for manufacturing steel mainly composed of fine ferrite particle texture with an average ferrite grain size controlled by a desired value of 1 μm or less.

19. (Currently amended) The warm control rolling method of claim 4, wherein Z is 12 or more and, the method is for manufacturing steel mainly composed of fine ferrite particle texture with an average ferrite grain size controlled by a desired value of 1 μm or less.

20. (Currently amended) The warm control rolling method of claim 5, wherein Z is 12 or more and, the method is for manufacturing steel mainly composed of fine ferrite particle texture with an average ferrite grain size controlled by a desired value of 1 μm or less.